LIBERTY INDUSTRIAL

POWER GENERATION

DECOMMISSIONING, DECONSTRUCTION & REMEDIATION CAPABILITY

Contents

Our team has delivered some of the largest and most complex decommissioning, demolition and remediation projects in the world. Tap the play button above to learn more about what we do.

Liberty Industrial

We are an award-winning provider of specialist decommissioning, deconstruction, and remediation services across the globe.

Our team generate value by providing complete integrated solutions. Together, we have set a new benchmark for our industry, cementing our status as a contractor of choice for the delivery of large and complex projects near and far.

01 **Closure Consulting & Demolition Engineering**

02 **Demolition Simulation & Modelling**

03 **Decommissioning**

04 **Decontamination & Industrial Cleaning**

05 **Ground & Waste Water Treatment**

06 **Dismantling & Demolition**

07 **Asset & Resource Recovery**

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Future Proof & Fit-for-Purpose

As we transition to cleaner energy solutions, the reduced dependency on the oil and gas industry will require these facilities to pivot their purpose and enter into a new phase.

There is an increased need to responsibly decommission these facilities and ensure they adhere to the Circular Economy (Waste Reduction & Recycling) Act 2021. Therefore, closure of these facilities often requires comprehensive closure planning and subsequent decommissioning, decontamination, deconstruction and remediation.

WHAT WE DO

Liberty Industrial offers a comprehensive range of integrated capabilities, including consulting services such as early contractor involvement, decommissioning, decontamination and hazardous material removal, demolition and dismantling services, industrial cleaning and site remediation and rehabilitation.

THE BENEFITS

Continuity of works, an accelerated delivery schedule and cost savings are just some of the synergy benefits of our integrated services offering.

Memorandum of Understanding for Generator Property Management

Accurate Closure Planning

We provide specialist decommissioning, demolition and remediation consulting services to complement our contracting division and deliver high-quality, objective advice.

As an industrial specialist, we can provide long term plant closure concepts, budgets, and redevelopment strategies for redundant site.

Years of experience enable us to expertly assess and engineer closure plans and provide advice compliant with International Financial Reporting Standards.

WHAT WE DO

- Decommissioning, Deconstruction & Remediation Planning
- Detailed Costing/Estimating
- Project Risk Register
- Early Contractor Involvement
- Quantity Take-off
- Detailed Methods
- Scheduling & Programming
- 3D Modelling & Structural Analysis
- Drone 3D Mapping, Thermal Imaging & LIDAR scanning

By understanding the client key drivers (including the end point or future site use) we are better equipped to provide fit-for-purpose, sustainable closure solutions.

3D MODELLING & SIMULATION

Liberty Industrial has acquired the exclusive Australian propriety license to operate the Extreme Loading for Structures (ELS) software developed by Applied Sciences International (ASI) based in the USA.

Liberty Industrial can model and simulate proposed demolition methodologies before execution. Serving as a key risk minimisation strategy for clients with large, technically challenging projects, the software allows us to visually demonstrate several plans and scenarios.

HIsmelt Kwinana Closure, WA for Rio Tinto

EARLY CONTRACTOR INVOLVEMENT

By understanding the client key drivers (including the end point or future site use) we are better equipped to provide fit-for-purpose closure solutions. This can include:

- De-energisation and decommissioning plans.
- Hazardous material audits.
- Identification of project risk items.
- Indentifying environmental consideration and understanding sustainability drivers to provide environmental regulatory compliance advice.
- Initiating the diversion of services so that future demolition activities are not impacted.
- Developing best-practice demolition methodologies.
- Developing detailed method statements for high-risk activities.
- Traffic management plans that coincide with demolition activities.
- Providing information and staging plans for scrap processing and laydown yards.
- Identifying environmental considerations and understanding sustainability drivers.
- Providing certainty on programming and project timeframes.
- Development of accurate costings for budgetary purposes.

Bulwer Island Refinery Gantry Demolition, QLD for BP

Dismantling & Asset Recovery

Liberty Industrial offers a complete dismantling and asset recovery service, covering all aspects of dismantling, resale and relocation.

We have demonstrated experience realising maximum value from a wide range of reusable plant, process equipment and scrap materials. We also have an extensive network of asset resale and resource recovery partners to negotiate the sale of unwanted or disused assets.

We provide all facets of the chain of custody to ensure structures are easily match-marked for reconstruction.

Gladstone Air Separation Unit (ASU) Plant Demolition, QLD for Air Liquide

Resource Recovery & Recycling

We take a resourceful and innovative approach to project delivery, ensuring waste is managed responsibly and sustainably.

We have established a national network of waste recovery and recycling resources to ensure we optimise salvage and recovery value to deliver positive commercial outcomes for all.

SERVICES WE OFFER

- Scrap Metal Processing & Recycling
- Precious Metal Segregation & Salvage
- Screening for Waste Minimisation
- On-site Crushing for Reuse
- Resale Options for Recycled Materials
- Reuse of Recycled Materials for Engineered Remediation Solutions or Rehabilitation

Wallerawang Power Station Demolition, NSW for Greenspot

ENVIRONMENTAL STEWARDS

We are committed to exemplary environmental compliance and stewardship, so our goal of environmental sustainability always underpins our business practices and guides our daily operations.

An enviable track record of environmentally sustainable practices and an uncompromising approach to environmental management has allowed us to routinely achieve upwards of **95% recovery**, delivering positive environmental outcomes and creating value for our project stakeholders.

SAFETY

Our highest priority and the foundation of everything we do.

EXCELLENCE

Industry leadership, best practice and operational excellence.

INNOVATION

Challenging convention and leveraging technology to deliver expert solutions.

SUSTAINABILITY

Exemplary environmental performance and stewardship.

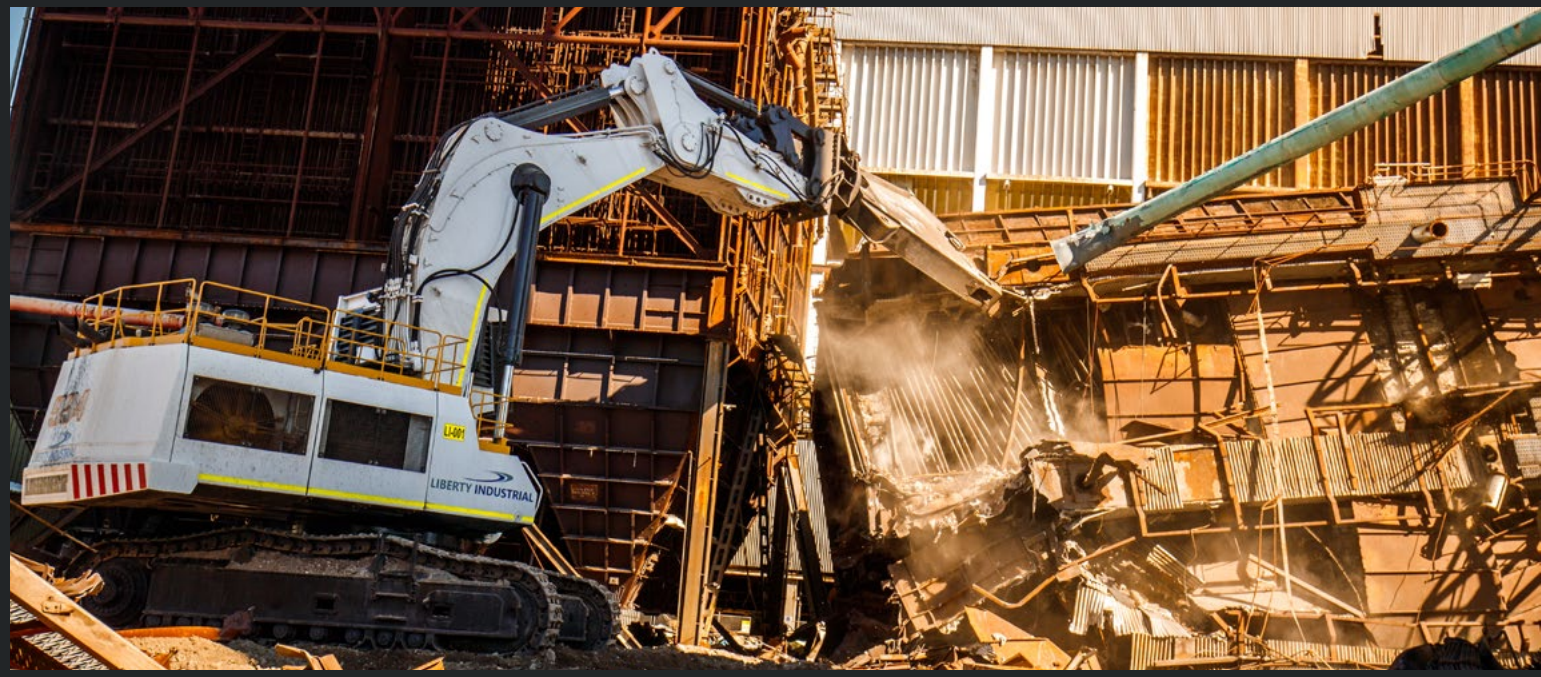
PEOPLE

Commitment to our people, social diversity, and our contribution to the community.

Expert Delivery

Investment in the future is our priority.

For us, utilising the most advanced technology and equipment in combination with our ability to leverage the best minds in the business has ensured we deliver innovative, cost-effective solutions that maximise value for our clients and project stakeholders – every time.



Munmorah Power Station Removal, NSW for Generator Property Management

Diversity in Demolition

Strategically designed demolition methodologies ensure we can manage the risks associated with complex demolition events.

Liberty Industrial has extensive experience with a broad range of demolition methods. These methods include:

- High Reach Demolition
- Mechanical Demolition
- Explosive Demolition
- Cut & Pull
- Cut & Lift

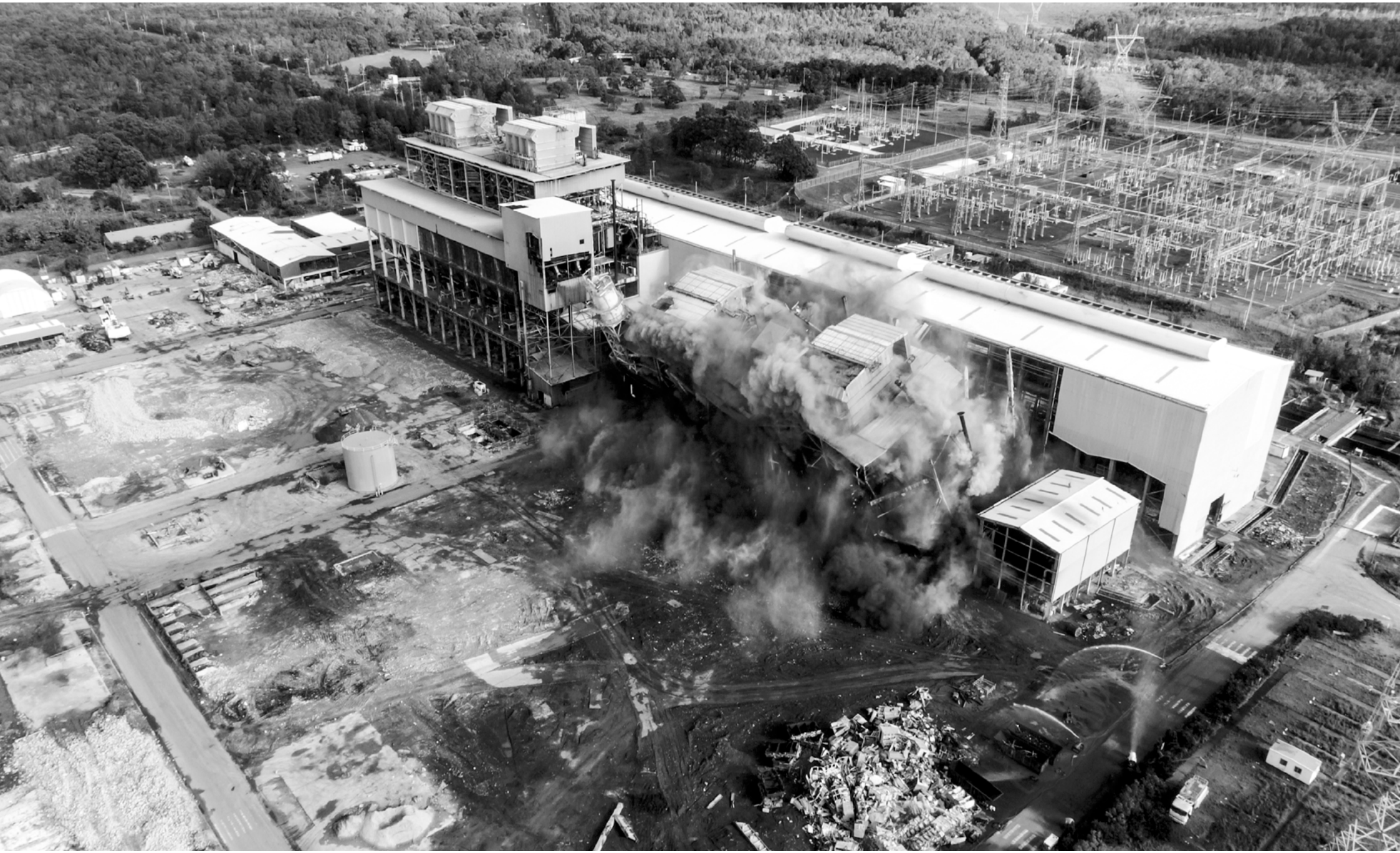
1.

3.

2.

4.

1. Wallerawang Power Station Demolition, NSW for Greenspot
2. Douglas Mine Site Demolition, VIC for Illuka Resources
3. Hammerhead Crane Deconstruction, NSW for Department of Defence
4. Munmorah Power Station, NSW for Generator Property Management



Responsive Remediation

To complement our core decommissioning, demolition and deconstruction activities, we provide innovative, sustainable and cost-effective remediation solutions to unlock the future potential of brownfield sites.

We have a comprehensive understanding of regulatory requirements to remediate contaminated sites. This includes designing engineered solutions, alongside technical and industrial service activities required to treat contaminated material in situ and/or remove contaminated material offsite for further processing.

WHAT WE DO

- Hazardous Waste Management & Removal
- Asbestos Management & Removal
- Contaminated Land Remediation
- Site Rehabilitation
- Groundwater & Wastewater Treatment
- In-ground Remediation
- Industrial Cleaning
- Emergency Response

Moorebank Intermodal Terminal Asbestos Stockpile Remediation, NSW for QUBE Logistics

Our experienced personnel have a proven track record of working in this highly skilled environment and are backed by state-of-the-art plant and equipment alongside leading-edge technology to execute highly complex projects safely and efficiently.

Our team boast a range of additional qualifications that complement the removal of hazardous material works, including:

- Rope Access
- Rigging
- Scaffolding
- Oxy Cutting / Hot Works
- Confined Space
- Cold Cutting
- Elevating Work Platforms
- Working at Heights

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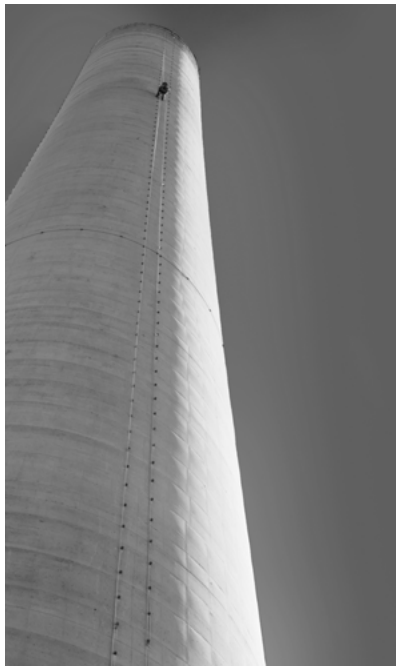

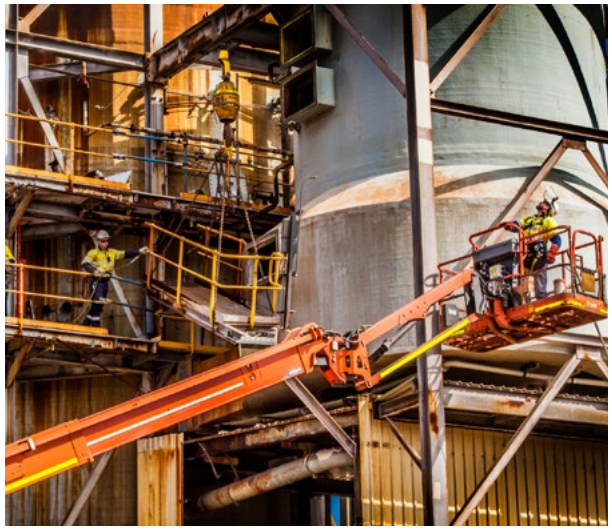

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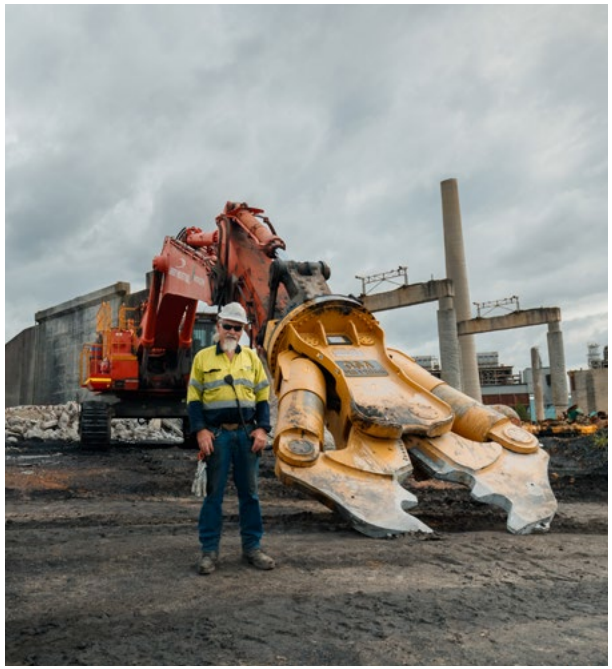
1. Boodarie Hot Briquette Iron Ore Plant Closure, WA for BHP Billiton
2. HIsmelt Kwinana Closure, WA for Rio Tinto

Past Experience, Present Expertise

We thrive on a challenge and have built a strong reputation for delivering some of the toughest decommissioning, deconstruction and remediation projects in the world.

POWER HIGHLIGHTS

- Awaba Colliery Deconstruction
- Bayswater Power Station UST Decommissioning
- Belconnen Power Station Decommissioning & Remediation
- Blackwater Coal Mine Stacker Demolition
- Cape Lambert Power Station Demolition
- Dampier Power Station Demolition
- Macquarie Coal Preparation Plant Demolition
- Mugga Lane Power Station Demolition & Remediation
- Muja Power Station Early Demolition Works
- Munmorah Power Station Demolition
- Norwich Park Coal Mine Plant Demolition
- Port Kembla Coal Stacker Reclaimer Demolition - Stage 1
- Port Kembla Coal Stacker Reclaimer Demolition - Stage 2
- Port Kembla Gas Terminal Early Works
- Swanbank B Power Station Demolition
- Wallerawang Power Station Demolition



WE PRIORITISE

- Rigorous thinking and project development
- A collaborative and considered approach
- Focus on driving commercial returns
- Efficient and safe project delivery
- Maximising commercial viability
- Accessing industry insights and best practice

Wallerawang Power Station Demolition

LOCATION Wallerawang, NSW

CLIENT Greenspot

DURATION 18 Months

VALUE AUD 13,000,000

STATUS Underway

TAP, WATCH & LEARN
vimeo.com/657248222

OUR PROJECT

Liberty Industrial has been engaged as the principal contractor for the decommissioning of the existing coal-fired Wallerawang Power Station, New South Wales. The scope includes demolition of two 59m boiler units, two 177m tall stacks, precipitators, coal handling plant conveyors, auxiliary bay, removal of equipment from within the turbine hall, smaller buildings, workshops, and complete HAZMAT removal.

THE CHALLENGES

Liberty Industrial faces various challenges due to the location and sensitive nature of the site. Several heritage structures located within and surrounding the site include an existing stack from the original power station, a stone viaduct that crosses Cox's River, and the Church of St John the Evangelist. These assets are required to be protected and kept intact for the full duration of the project.

ROBUST SOLUTIONS

To overcome these challenges our project team has engaged specialised consultants such as a Heritage Structural Engineer, to inspect and analyse the current conditions of the heritage structures; Environmental Consultants to assess and provide predictions for air blast and vibration limits during blast events; and Applied Science International's (ASI) innovative 3D modelling software to analyse and model scenarios for the falling of the two stacks and the two boiler units. The latter is a critical risk strategy to ensure that no damage occurs to these existing assets.

Traffic Management is another challenge, with public road closures required for sections of the Castlereagh Highway and Main Street in Wallerawang during the three blast events. Our project team will undertake continuous strategic planning with Greenspot, Transport for New South Wales, and Lithgow City Council to provide a solution for the temporary road closures and prevent disruption to the access of these roads.

EXCEPTIONAL OUTCOMES

Liberty Industrial is on track to complete the project within a two-year timeframe, allowing the land to be returned to Greenspot and be reused as an industrial park development.

Port Kembla Gas Terminal Demolition & Remediation

LOCATION Port Kembla, NSW

CLIENT Australian Industrial Energy

DURATION 8 Months

VALUE AUD 17,000,000

STATUS Completed 2021

AWARDS

2022 World Demolition Award Shortlist
Civils Demolition

TAP, WATCH & LEARN
vimeo.com/700703470

OUR PROJECT

Australian Industrial Energy engaged Liberty Industrial to undertake the demolition, remediation, and earthworks at Port Kembla Gas Terminal Early Works project in the Illawarra region of NSW, 8km from the Wollongong CBD.

Our team was instrumental in the demolition and removal of the former Berth 101 including extraction of 499 steel piles and 71 turpentine fender piles. The piles at over 25m long were embedded through sand and stiff clays, terminating in sandstone bedrock.

THE CHALLENGES

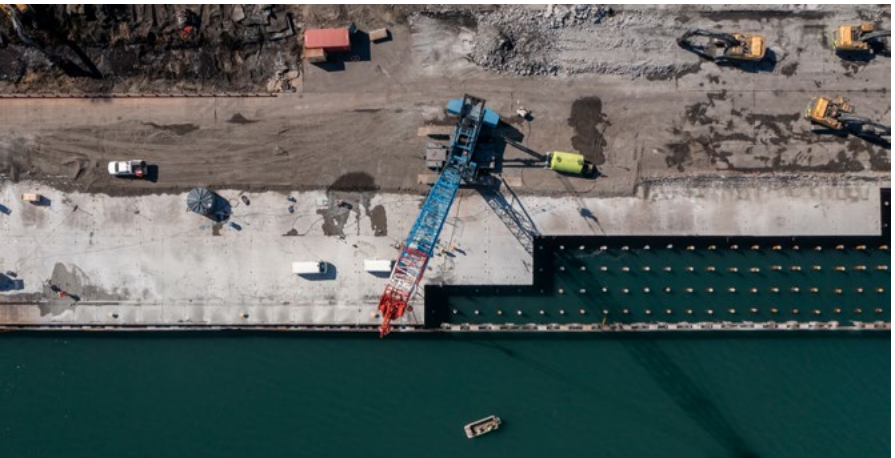
- Approximately 10,000m^3 of concrete and 30,000m^3 of heavily bound slag was demolished and crushed for sustainable re-use. 76,000t of excavated sand were transported across our own, trade approved, weighbridge to the outer harbour for construction works associated with the wider scheme.
- 66 unexpected finds were encountered during the works. Over 9000m^3 of asbestos impacted soils were managed and segregated, and over 100t of asbestos pipes, conduits and associated materials were disposed of offsite.

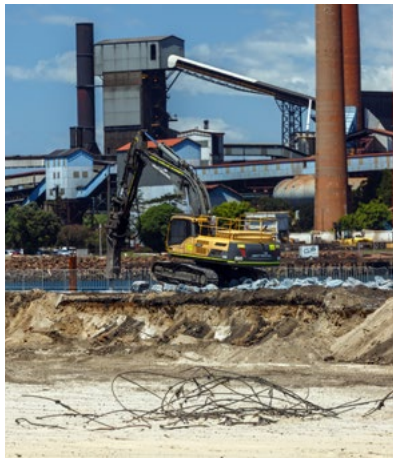
ROBUST SOLUTIONS

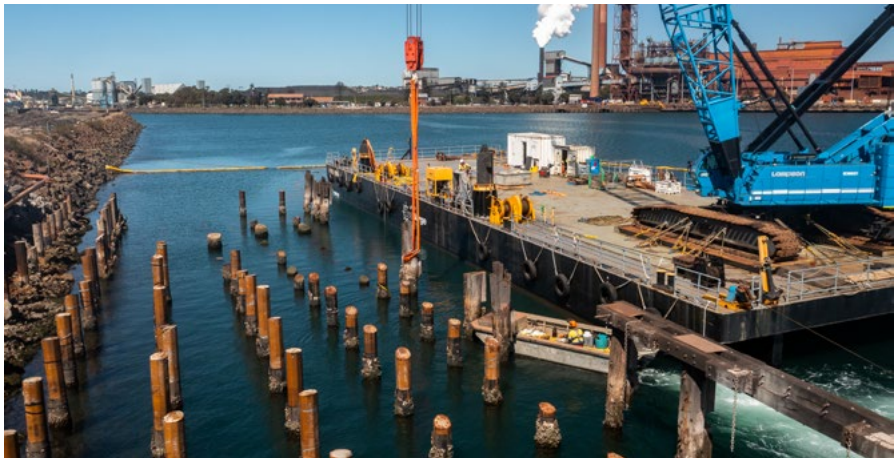
- Our team completed the successful commissioning of one of Liberty Industrial's two owned-and-operated high flow rate Chemically Enhanced Dual Media Water Treatment Plants. Capable of treating contaminants such as heavy metals, PFAS, and organic and inorganic pollutants to levels below laboratory reporting limits, the plant added confidence to meet the site's strict Environmental Protection Licence.
- All marine works were conducted within the sensitive marine environment of the third-largest port in NSW. Daily water sampling during pile extraction was conducted to meet the DPI requirements and a 400m silt curtain was installed and maintained for the duration of the project.

EXCEPTIONAL OUTCOMES

- The extraction of the steel piles was never attempted on such a scale and involved various techniques. By far the most successful and innovative technique for extraction of the land-based piles was achieved by welding 40mm steel plates onto the pile head using skilled boilermakers and a 300t crawler crane, fitted with the largest single pile clamp available in Australia.
- With Liberty Industrial's work complete, the project will pave way for the development of Australia's first liquefied natural gas regasification terminal – a landmark project being delivered by Australian Industrial Energy, which will see the Port Kembla Gas Terminal have the capability to supply more than 75% of NSW's energy requirements.







Munmorah Power Station Removal

LOCATION Colongra, NSW

CLIENT Generator Property Management

DURATION 28 Months

VALUE AUD 45,000,000

STATUS Completed 2018

AWARDS

2019 World Demolition Awards Winner
Industrial Demolition

TAP, WATCH & LEARN
vimeo.com/255311659

OUR PROJECT

Generator Property Management commissioned Liberty Industrial to remove a 1,400 megawatt coal fired power station including four 350 megawatt steam driven turbo-alternators, two 155m high chimney stacks, four boiler houses, coal handling plant and conveyors and 2.3km of ash lines.

THE CHALLENGES

Removing 890 tonnes of bonded and friable asbestos throughout the site prior to demolition while working at heights of up to 60 metres in an area prone to high winds.

Adhering to strict Environmental Protection Licence (EPL) – the site was located between Lake Munmorah and Lake Budgewoi, which are connected by two cooling water canals that run through the site.

ROBUST SOLUTIONS

- Careful planning and extensive consultation with SafeWork NSW and a number of government regulatory authorities to ensure full compliance.
- Intensive investigations to identify areas of asbestos which were not previously known to the client.
- Detailed engineering studies and 3D modelling simulation.
- Mobilisation of 20 asbestos specialists.
- Deployment of full-time hygienist with on-site lab.
- Construction of a range of negative air encapsulations throughout the 60m height of the boiler structures.
- Construction of a highly engineered and detailed access scaffolding and enclosure to access the penthouse at the top of the boiler houses, which included the use of a 300t crane to lift up the required plant and equipment.
- Construction of a 30m x 20m removable dome shelter for use as a fully functional mechanical workshop managed by Liberty Industrial's in house mechanics.
- Provision of state-of-the-art equipment including Liberty Industrial's own 230t Liebherr 994 complete with the world's largest shear attachment – the Genesis GXT 2555R.
- Meticulous organisation and execution of controlled explosive techniques to topple the majestic twin stacks exactly as planned.

EXCEPTIONAL OUTCOMES

The entire project was masterfully executed, on time, on budget and without incident.

A staggering 98% of all waste was recycled – that's 102,392t of material.

Liberty Industrial was awarded the Winner of the Industrial Demolition Award at the 2019 World Demolition Awards. The project is the largest power station demolition venture to be carried out in Australia to-date.

Swanbank B Power Station Demolition

LOCATION Swanbank, QLD

CLIENT Stanwell Corporation

DURATION 18 Months

VALUE AUD 13,500,000

STATUS Completed 2015

TAP, WATCH & LEARN
vimeo.com/120334919

OUR PROJECT

Stanwell Corporation commissioned Liberty Industrial for the deconstruction of a 480 megawatt coal fired power station, which included cooling towers, storage tanks, a boiler house and four boilers, a turbine hall including steam turbines and generators, condensers, a feed water treatment plant, control room, transformers, ash and dust handling systems, electrostatic precipitators and coal handling infrastructure.

THE CHALLENGES

Removal of asbestos containing thermal insulation to the station's steam piping network that ran between the four turbines and the boiler house. This piping went as high as 55m to the top of the boilers.

ROBUST SOLUTIONS

- Meticulous planning and consultation.
- Extensive investigation to discover asbestos locations not previously known to the client.
- 3D modelling simulation.
- Construction of purpose-built and complex scaffolding and encapsulations .
- Construction of a purpose-built stripping room where asbestos was removed from piping, detailed and cleaned before clearance for recycling.
- A combination of mechanical demolition methods and induced collapse techniques.
- Provision of state-of-the-art demolition equipment, including Liberty Industrial's heavy duty customised 230t Liebherr 994 complete with the world's largest shear attachment – the Genesis GXT 2555R.

EXCEPTIONAL OUTCOMES

The project was masterfully executed as planned to client's complete satisfaction, on budget, on schedule and without issue or injury.

- More than 18,000m^2 of Galbestos sheeting was removed from turbine hall and auxiliary bays.
- 335t of asbestos containing materials were removed.
- Items of process plant not flagged for resale and relocation were recycled.
- All concrete and brick material was processed and retained on site for use as backfill.
- All transformer oils were removed and refined at an offsite facility in NSW for future reuse.
- All scrap was processed to export size, with ferrous scrap direct-exported via bulk shipment from Pinkenba Wharf, and non-ferrous scrap in 20 and 40ft shipping containers.

Dampier Power Station Demolition

LOCATION Dampier, WA

CLIENT Rio Tinto

DURATION 4 Months

VALUE AUD 7,763,000

STATUS Completed 2018

OUR PROJECT

The Dampier site located in the coastal Pilbara region of Western Australia consisted of a power station partially deconstructed over two failed stages in 2012 and 2014 by other demolition contractors.

Rio Tinto commissioned Liberty Industrial to demolish the remaining facilities which included: the turbine hall, chimney stacks, seawater intake infrastructure, water storage tanks, cooling water outlet, ALCO generator, associated piping, and all the remaining elements within the battery limits. The site spanned an area of approximately 50,000m^2.

THE CHALLENGES

- Liberty Industrial conducted a hazardous materials gap audit to assess the presence of friable and non-friable asbestos.
- Mobilisation of a specialist asbestos removal crew and equipment to remove hazardous material prior to work commencing.
- We provided an extensive engineered design to develop a demolition methodology using a cut and pull technique thus induce collapsing structures to a safe working height where machines mechanically processed the structures once safely brought to the ground.
- All steel material was transported to a scrap handling area where they were processed and down-sized for recycling.
- We demolished, processed and pulverised all concrete slabs, hardstands, footings, piles, and mixed masonry material in preparation for backfilling of the Sea Water Intake Pond.

EXCEPTIONAL OUTCOMES

The project was masterfully executed as planned to the client's complete satisfaction, on budget, on schedule and without injury or incident.

Cape Lambert Power Station Demolition & Remediation

LOCATION Cape Lambert, NSW

CLIENT Rio Tinto

DURATION 13 Months

VALUE AUD 11,000,000

STATUS Completed 2014

TAP, WATCH & LEARN
vimeo.com/140248746

OUR PROJECT

Rio Tinto commissioned Liberty Industrial for the demolition and removal of the redundant Cape Lambert Power Station, located in Western Australia. This included decommissioning and de-energising the station, removing friable asbestos, demolishing and removing boilers, boiler stacks, and removing all structures to the top of ground slabs.

THE CHALLENGES

- Extensive asbestos removal works were required before any demolition works could begin safely.
- Three standing boilers at 18m high required complete scaffold encapsulation under negative air conditions for removal of asbestos.
- Working at the height of summer when temperatures often broke 40 degrees, all personnel were subject to daily hydration monitoring and staggered work hours.

ROBUST SOLUTIONS

- We deployed an expert asbestos removal crew of 48 personnel at the height of the Project working split shifts around the clock. Due to the remote location, all were housed at the client's mining camp working a 4 week on and 1 week off roster.
- Installation of special air conditioning units to ensure the working temperature within enclosures remained within fatigue management guidelines.
- We developed a meticulous demolition plan to induce collapse stacks and weaken boilers before being pulled to the ground with a 120t excavator.
- Provision of 2 x 120t, 46t and 36t excavators with shear and grab attachments, 40t moxy, water truck, service truck, telehandler, semi tippers and various sized boom lifts.

EXCEPTIONAL OUTCOMES

The project was masterfully executed as planned to the client's complete satisfaction, on budget, on schedule and without injury or incident.

A total of 290t of asbestos waste was disposed of at a designated off-site licensed landfill. We successfully demolished several buildings' structural steel frames, concrete slabs, core filled blockwork consisting of 3 boilers at the height of 18m, 3 turbines enclosed with steel plate and 15 transformers.

Norwich Park Mine Coal Preparation Plant Demolition

LOCATION Dysart, QLD

CLIENT BHP / BM Alliance Coal Operations Pty Ltd

DURATION 6 Months

VALUE AUD 2,677,350

STATUS Completed 2020

OUR PROJECT

BHP Mitsubishi Alliance commissioned Liberty Industrial to achieve the safe and controlled demolition of nominated redundant structures which previously comprised the Coal Handling Preparation Plant at the Norwich Park Mine site in Central Queensland.

The scope of work included demolition of all above ground structures such as coal handling conveyors, the Breaker Station, Reject Bins, Product Coal Stacker, Raw Coal Reclaim Tunnel, Radial Stacker, Thickener and Clarifier tanks and the Coal Handling Preparation Plant which stood 37m above ground level. The project also included a significant civil works program which comprised detailed backfilling and compaction under level 1 geotechnical supervision.

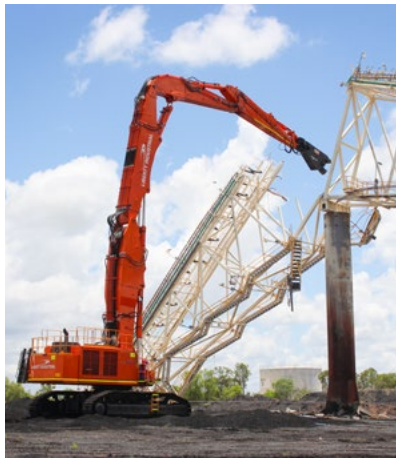
THE CHALLENGES

- Developed a carefully considered deconstruction methodology designed for maximum effectiveness.
- Mobilised qualified crew and equipment fleet.

EXCEPTIONAL OUTCOMES

Liberty Industrial achieved successful project completion in the agreed 6-months timeframe, within budget and without incident.

A total of 4,500t of ferrous and non-ferrous steel was recycled with 6,000t of brick and concrete downsized and stockpiled on site for client's future reuse. The project resource recovery exceeded 95% of all materials with only 5% of the waste generated going to landfill, that being asbestos and general rubbish.



Collinsville Open Cut Coal Mine
Removal of Redundant Infrastructure

LOCATION Collinsville, QLD

CLIENT Glencore

DURATION 3 Months

VALUE AUD 2,000,000

STATUS Completed 2019

OUR PROJECT

Glencore commissioned Liberty Industrial to demolish several redundant installations at the Collinsville Open Cut Mine located in Queensland. Demolition works included a Train Load Out facility with a 120m long inclined conveyor, the Raw Coal Crushing facility and the Road Load Out installation along with an adjoining 200m long inclined conveyor.

THE CHALLENGES

The redundant Raw Coal Crushing facility was straddling a live conveyor line and could not be demolished in situ so the removal works had to be carefully planned and engineered to prevent any damage to the surrounding live plant as well as minimise impact to daily operations.

The structure had to be methodically rigged, separated from the structures beneath, then lifted using a range of mobile cranes.

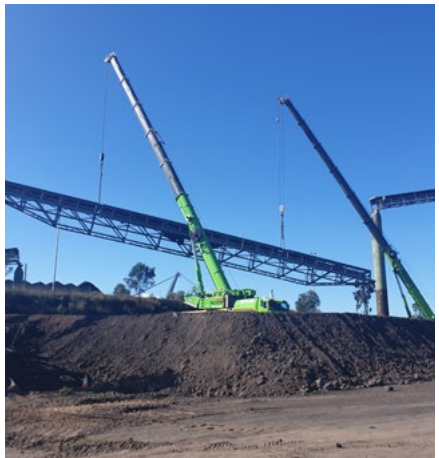
ROBUST SOLUTIONS

- Liberty Industrial developed an extensive methodology to enable minimal disruption to Glencore's daily operations, keeping shutdowns and outages to absolute minimum occurrences and durations.
- We mobilised a team of qualified crew, alongside state-of-the-art plant and equipment for the works.
- Liberty Industrial's 200t Kocurek modified Hitachi EX1200 High Reach Excavator was deployed to demolish the Road Load Out Installation. The machine was fitted with a 7t shear to demolish the inclined conveyor first.

Then, changing the attachment for a 6t Concrete Cracker, the concrete bin was demolished from the top down in less than two days.

EXCEPTIONAL OUTCOMES

The project was masterfully executed as planned to the client's complete satisfaction, on budget, on schedule and without injury or incident.



Macquarie Coal Preparation Plant Demolition

LOCATION Killingworth, NSW

CLIENT Oceanic Coal Australia Ltd

DURATION 6 Weeks

VALUE AUD 4,000,000

STATUS Completed 2018

OUR PROJECT

Oceanic Coal Australia Limited commissioned Liberty Industrial to undertake the demolition and removal of the Macquarie Coal Preparation Plant located in the Lake Macquarie Region of New South Wales.

The project included above and below ground tunnels and 2kms of conveyor systems, demolition of several coal transfer towers, coal bins, thickener tank, and substation. The project was the second stage of works we had undertaken. The first being demolition of the West Wallsend Colliery Pit Top Coal Handling Facilities in 2017.

THE CHALLENGES

- The Site was located in close proximity to Lake Macquarie and residents.
- Protecting the railway line for future use.

ROBUST SOLUTIONS

- Conducted structural engineering analysis of the weakening methodology for all key structures to undergo induced collapse.
- Deployed specialist asbestos and demolition crew along with eight excavators ranging from 8 to 120t, as well as various support machinery, plant and equipment.
- Removed all hazardous materials on site including asbestos in both plant and buildings, draining of oils from machinery, cleaning of tanks and pumping out contaminated water to prevent contamination and protect local environment.
- Induced collapsed conveyor systems, the largest being the two Coal Stack Out conveyors spanning 150m in length to the west and 120m in length to the east of the transfer tower; the conveyors reaching 35m in height supported by hollow steel legs mass filled with concrete, standing either side of the 45m high transfer tower itself weighing 500t.
- Demolished the Rail Loading Bin, standing 55m high and consisting of 2,200t of concrete using controlled explosive techniques.
- Prior to being induced collapsed with explosives, the main Coal Washery Plant building standing 30m high and 60m long was progressively weakened involving the cutting by hand of over 300 columns, beams and braces, allowing the structure to be collapsed using the simultaneous pulling by a 120t and 70t excavator.

EXCEPTIONAL OUTCOMES

The project was executed on time, within budget and without injury or incident. 98% of material including steel and non-ferrous metals were recovered for recycling.

Quality Assurance

The safety and wellbeing of our people is our highest priority and the foundation of everything we do – from the decisions we make right down to our daily operations.

We pride ourselves on being a safe and reliable contractor who is accustomed to working to stringent compliance requirements for the management of occupational health and safety, quality and environmental performance.

Our achievements in safety and training have received:

Shortlisting at the **2022** and **2019 World Demolition Awards** in the Safety & Training Award category.

Shortlisting at the **2022 WHS Foundation** in the **WHS Promotion & Program** category.

Highly commended at the **2019 National Safety Association Excellence Awards** for the development of our Oxy Cutting and Excavator Operator training program.

SAI GLOBAL CERTIFICATION

Our accredited Business Management System is independently certified by SAI Global Certification and includes:

- ISO 9001:2015
  Quality Management System
- ISO 45001:2018
  Occupational Health & Safety Management System
- ISO 14001:2015
  Environment Management System

ISO 9001 ISO 45001 ISO 14001

Community and Indigenous Participation

We understand the importance of supporting the communities in which we operate.

Our business strategy focuses on mutually beneficial initiatives for engaging communities. This is realised through procurement policies and procedures that reflect our long-term commitment to ensuring locally owned and operated businesses and individuals share the economic and capacity building benefits projects bring to the regions we work in.

INDIGENOUS INCLUSION

We welcome the opportunity to work with Indigenous individuals, businesses, organisations, and communities to maximise participation and engagement across our business.

We support initiatives that assist and encourage Indigenous people in the transition from education and training to the workforce and the broader local economy.

Liberty Industrial's framework for indigenous engagement comprises the following elements:

- Direct employment
- Entry-level employment, training, and development
- Subcontractor and supplier relationships and indigenous supply and partnerships
- Joint venture participation with Indigenous businesses
- Cross-cultural awareness and diversity training program

Liberty's long standing relationship with **IWIMRA (Indigenous Women in Mining & Resources Australia)** sets out a partnership in which IWIMRA will help to provide a structured approach towards creating a vision of cultural inclusion, cultural safety, and best practice within the operational confines of all liberty Industrial's upcoming projects.

Through this Community Engagement Strategy IWIMRA and Liberty will focus on deeper engagement across all areas of the business and its processes including;

- Community commitment to all areas and sites Liberty Industrial currently service
- Workforce investment
- Indigenous procurement policy
- Cultural capability training

Internationally Acclaimed

Liberty Industrial has received local and international recognition, most notably at the World Demolition Awards, winning five awards in the last nine years including the inaugural overall World Demolition Award.

2022 WHS Foundation, WHS Promotion & Program – Shortlist
Subcontractor Improvement & Subby Buddy Initiative

2022 World Demolition Awards, Civils Demolition – Shortlist
Port Kembla Gas Terminal Early Works

2022 World Demolition Awards, Safety & Training – Shortlist
Subcontractor Improvement & Subby Buddy Initiative

2021 World Demolition Awards, Explosive Demolition - Shortlist
Remote Demolition of a Wind Turbine

2020 World Demolition Awards, Industrial Demolition - Shortlist
Iluka Program of Demolition Works

2020 World Demolition Awards, Contract of the Year Under US$1M - Winner
Blackwattle Bay Batching Plant Demolition

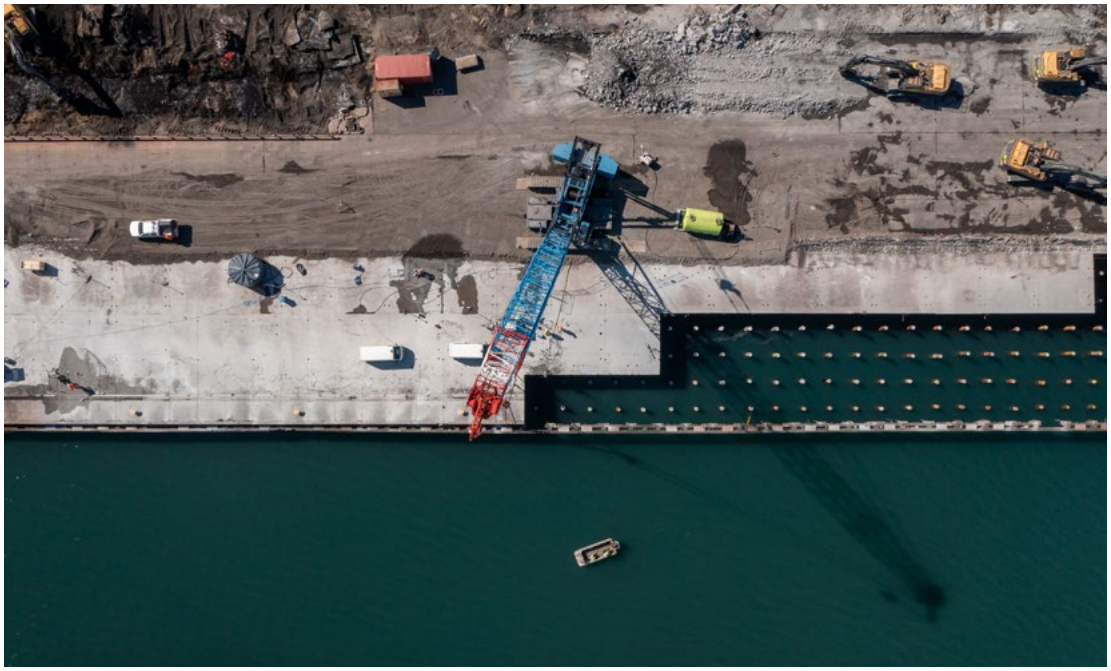
2019 World Demolition Awards, Industrial Demolition - Winner
Munmorah Power Station Removal

2019 World Demolition Awards, Contract of the Year Over US$1M - Finalist
Port Kembla Coal Terminal Stacker and Reclaimer Demolition (Stage 2)

2019 World Demolition Awards, Contract of the Year Under US$1M - Finalist
Port Kembla Gateway Crane Project (Stage 2)

2019 World Demolition Awards, Safety & Training - Finalist

2019 National Safety Awards of Excellence - Highly Commended
Best WHS Training Program



Port Kembla Gas Terminal Demolition & Remediation, NSW for Austalian Industrial Energy

2019 CCF Earth Awards, Excellence in Civil Construction Over $75M - Finalist
Moorebank Intermodal Terminal Remediation

2018 ALGA Excellence Awards, Best Remedial Project Over $1M - Winner
Moorebank Intermodal Terminal Remediation

2018 World Demolition Awards, Industrial Demolition - Finalist
Port Kembla Gateway Coal Terminal Project (Stage 1)

2017 World Demolition Awards, Urban Demolition - Finalist
Sydney Harbour Control Tower Demolition

2016 World Demolition Awards, Contract of the Year Under US$1M - Winner
Duck River Bridge Dismantling

2016 World Demolition Awards, Civil Demolition - Finalist
Hamilton Wharves Demolition

2016 World Demolition Awards, Contract of the Year Over US$1M - Finalist
Clyde Oil Refinery Removal

2015 World Demolition Awards, Contract of the Year Over US$1M - Finalist
Garden Island Hammerhead Crane Deconstruction

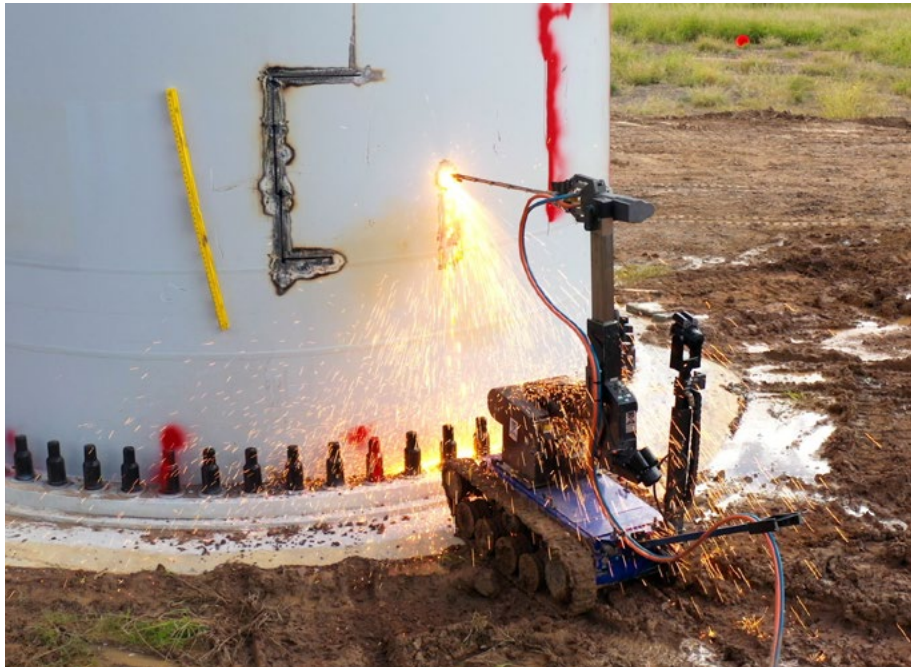
2015 World Demolition Awards, Explosive Demolition - Winner
Omega Tower Demolition

2014 World Demolition Awards, Industrial Demolition - Winner
Rio Tinto's HIsmelt Kwinana Closure

2013 World Demolition Awards, Industrial Demolition - Shortlist
BHP Billiton's Boodarie Hot Briquette Iron Plant Closure

2012 World Demolition Awards, Industrial Demolition - Shortlist
BHP Billiton's Boodarie Hot Briquette Iron Plant Closure

1.



WORLD DEMOLITION AWARDS2021 SHORTLISTED
EXPLOSIVE DEMOLITION AWARD

WORLD DEMOLITION AWARDS2020 WINNER
CONTRACT OF THE YEAR UNDER US$1 MILLION

2.

1. Remote Demolition of Wind Turbine, QLD for General Electric
2. Blackwattle Bay Concrete Plant Demolition, NSW for Hanson

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